THE WISCONSIN ARCHITECT

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THE WISCONSIN ARCHITECT

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The State Association of Wisconsin Architects

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Wisconsin Chapter, The American Institute of Architects

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Producers' Council Club of Wisconsin

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ALEXANDER C. ESCHWEILER, *Architect*

State Association of Wisconsin Architects; Executive Board Meeting,

Meeting called to order by President Wm. Mickelsen at 10:20 A.M.

Members present: Messrs. Wm. Mickelsen, Leigh Hunt, Gregory Lefebvre, Walter Memmler, Edw. Wettengel, Edmund Schrang and A. L. Seidenschwartz.

By Proxy: Messrs. Emiel Klingler, C. Madsen, Wallace Brown, B. A. Knobla and Gerrit DeGelleke.

Absent: Mr. William Schneider.

Minutes of the Board meeting of June 8th, approved as printed.

REPORTS OF COMMITTEES

Publicity Committee:

Mr. Hunt reported no special activity. A discussion relative to the date for listing building reports in the Wisconsin Architect followed. Mr. Hunt suggested, due to the coming annual convention, that the listing of building reports be postponed until after the convention.

Convention Committee:

Mr. Leigh Hunt, Chairman. During the interim between June 8th meeting and this meeting, President Wm. Mickelsen appointed Leigh Hunt as Chairman of the Convention Committee. Mr. Hunt reported that on August 8th a meeting was held with Mr. Hilton, President of the Producers Council Club of Wisconsin and Mr. A. L. Seidenschwartz to discuss the date of the convention. Arrangements were made to hold the convention in Milwaukee at the Plankinton Hotel on Thursday, Friday and Saturday, September 26, 27 and 28. The general arrangements to be as follows: September 26: Architects' Exhibit to be shown in the Sky Room of the hotel and to be open to the public. Pre-convention meeting of the Executive Board. The Producers Council to have complete charge of the Exhibitors' space on the Mezzanine floor, their exhibits to be set up on September 26, 27 and 28. Convention Business will be transacted on Sept. 27 and 28. Time of banquet not definitely set.

Mr. Edmund Schrang and A. L. Seidenschwartz were appointed members of the Convention Committee to assist Mr. Hunt.

Motion made that the date selected by the Convention Committee be accepted and carried.

It was suggested by several members of the Board that the Committee invite Mr. Byington of the Johns-Manville Company to attend the convention.

Practice Committee:

Mr. Leigh Hunt, Chairman. No report. A general discussion followed on the status of an Architect under the registration law.

Plan and Field Inspection, Wisconsin Industrial Commission:

No report.

Special Committee:

Registration Legislation. General Discussion. A motion was made by Mr. Leigh Hunt and seconded by Mr. Walter Memmler that a letter be sent by the Secretary to the Attorney General asking for report on the Wurm-Rowinski case as to what action has been taken to date. Motion carried.

Building Congress:

Mr. Walter Memmler, Representative. Reported that data was being collected by the committee in charge of the revision of the Mechanics Lien Law.

Revision of Dues:

Walter Memmler. No report. Some discussion followed relative to the raising the amount of the annual dues so that the funds received would be adequate for more extensive legal work. It was moved and seconded that the question of dues be presented to the

convention for general discussion and action. Motion carried.

Membership Committee:

The Secretary reported that 142 had paid their dues for 1940. Since the report was made, the number has been increased to 143.

Picnic Committee:

Edmund Schrang. The picnic was by far one of the finest held by the Association. The day and the grounds were ideal. 101 members of the Association and Producers Council attended.

Milwaukee Lake Front Citizens Committee:

Mr. DeGelleke, Chairman. No report.

Large Housing:

Mr. DeGelleke, Chairman. No report.

Small Housing:

Mr. Schrang, Chairman. No report.

State Public Works:

No report.

Wisconsin Architect:

Report of June 1 to June 30, 1940. Total earnings for Association to date, $12.04. Moved by Mr. Seidenschwartz and seconded by Mr. Lefebvre that the report be accepted. Motion carried.

New Business:

President Wm. Mickelsen appointed the following members on the Resolutions Committee for the Convention. Mr. Herbert Ebling, Chairman. Mr. N. R. Safford and Mr. DeGelleke.

The Secretary reported that a communication was received from President Bergstrom of the American Institute of Architects, requesting that the names and rank of all reserve officers in the military service of the United States be sent to the A.I.A. offices as soon as possible. The Secretary reported that a complete survey of the State was made and that not only the names of reserve officers but that all former service officers names were also sent. A special list was made of all A.I.A. members so that it was not necessary for the Wisconsin Chapter A.I.A. Secretary to make canvas.

There being no further business to come before the meeting, same was adjourned at 3:30 P.M.

ARTHUR L. SEIDENSCHWARTZ,
Secretary.

Schneider Heads Milcor Heating and Ventilating Division

In order to provide a more complete service for the Warm Air and Air Conditioning industry, the Milcor Steel Company, leading manufacturers of Sheet Metal and Fireproof building products, has announced the appointment of George Schneider to the managership of its newly reorganized Heating and Ventilating division.

Twenty years' experience with Milcor has given Mr. Schneider a thorough knowledge of the Sheet Metal and Heating industries and their problems. He spent his first six years with Milcor in the shipping and order departments and then became a Milcor salesman.

For the past 13 years Schneider has covered Wisconsin's Fox River Valley and Upper Michigan territories for Milcor.

Architects Find Many Glass Uses

The old saw that "there's nothing new under the sun" is, to architects at least, perennially untrue. For although the architectural academician may be able to point to archaeological history to show classic ancient prototypes of almost every "new" form, he will be unable to prove antiquity for "new" substances.

As a result of technological developments, the modern architect has at his disposal many truly new substances and materials of which the architects of old could not even dream. And these new materials—the metals, the plastics, the glasses—are lending a new aspect to American life, with the architect playing the role of interpreter and "glorifier."

One of the more important factors in the changing national scene is the current movement toward decentralization. This trend, most commonly considered as a factor in the national economy, has its counterpart in the decentralization of the individual community structure. It is expresed in a strong movement toward "a more suburban life," and consequently less concentration of a community's commercial activity "downtown." An unhappy result of this generally applauded decentralizing movement is the rapid decline and deterioration of many once prosperous "downtown" business areas, bringing in its wake declining rental values and volume of trade, and "blighted" areas of city real estate.

This problem is being solved in many communities by a partnership between industry and the architectural profession—as the former provides and the latter specifies for use the many new structural and decorative materials with which blighted or run-down business areas may be rehabilitated and dressed up to the point where they are once again comunity assets—and going, profitable concerns to their proprietors.

It has been proved again and again in recent years that tasteful, modern "dressing up" of store-fronts is a powerful antidote for declining business in the face of a general deterioration of neighborhood appearance.

In homes, too, up-to-date architects are taking advantage of the best in modern structural and decorative materials to make the houses they design beautiful, durable and eminently liveable. These very qualities, of course, also make the house salable and stable in value through the years.

Among the most widely used of these modern materials for architecture is glass in its many forms; for here both the architect and the builder find the artistic appeal and the physical characteristics of glass ideal for their work.

Glass in its modern forms has an almost infinite variety of uses in architecture and building. As vitrolite, a colorful structural glass, it is a highly successful medium for the modernization of store-fronts, theaters, business buildings. A group of retail jewelry store owners who modernized shabby and outmoded exteriors with this glass discovered that profits increased up to 300 percent.

In many other ways, too, glass is used successfully and profitably in stores: in the form of polished plate glass for inviting, rich-loking display windows which will set off merchandise to the best advantage, with no

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visual distortion: for interior show-cases, utilizing the same properties; in the form of plate-glass mirrors to lend a note of modernism to store interiors and create the illusion of added spaciousness, and figured-glass translucent partitions which transmit light abundantly while providing a certain amount of privacy.

Keeping pace with the development of eye-attracting flat glass products, new types of metal trimmings have come along to serve the up-to-date designer in giving a final "pat" to windows, doors and other areas in stores, offices and homes. A step forward in this field has been the introduction of extrudalite glass-retaining moulding—self-supporting trim of extruded aluminum or bronze, in unusual designs with the added feature of evenly distributed pressure over glass areas.

In home designing, glass has come into its own as a structural and decorative medium of prime importance in the modern scheme of living, which lays emphasis on light, smartness, and comfort. Here progressive architects are forever finding new uses for it: extra-generous fenestration of polished plate glass in "picture windows" to bring outdoor scenes inside; structural glass wall surfaces for kitchens and bathrooms; figured and etched glass for decorative screens and lights.

Use of plate glass mirrors, clear or in colors, has gone far beyond the days when mirrors were mere "looking glasses." The decorative quality of this modern architectural medium has opened wide the doors to bold experiment in basic design and decoration. Mirrors, more and more, are being used with marked advantage as a focal point around which to design whole rooms, with the mirror playing the part of multiplier—to repeat favored colors or duplicate important patterns. Or perhaps the silvered plate glass simply reflects into the room a bit of charming outdoor vista, or serves to give an appearance of greater spaciousness, or reflects more light from the windows into dark corners, and thus brightens the whole room.

Glass, however, in the hands of today's forward-looking architect, is by no means limited to merely decorative uses in home-building. It has important contributions to make in economy and health.

Through double glazing household fuel economies have been shown to run as high as 30 per cent. The far-reaching effects of such material savings as this has an important bearing on living standards by making homes more livable the year 'round—more uniformly cool in summer and warm in winter.

This is a health factor which makes this extended use of glass in modern home construction doubly beneficial, for even temperatures of relatively high humidity are conducive to better general health.

Of coudse nowadays architects need not stop in their use of glass just in its outright decorative or functional applications. The newest product of the glass research laboratories permits function and decoration to be happily wedded, so that striking modernism may reach a new high in the all-glass house, factory or office building. This new development in glastone—a combination of shining colored vitrolite bonded to the face of a load-bearing, light-weight concrete block which will permit the erection of glass-faced buildings to any height desired.

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Glass Blocks

By A. W. VARASSE

A block of blue glass believed to be from the remote period of 2500 B. C. has been found in Iraq, together with evidence that it was used as a building material. Could it be possible that glass was used as a building product in a civilization long since dead? In any event it is not unlikely that a form of glass was used and may be re-emerging in our civilization as a predominant note in our everyday lives.

When we consider the accomplishments of glass during the past decade, in the light of the five thousand years since its probable discovery, it is very little short of a miracle.

Various factors of evolution are responsible for these accomplishments, such as better and less expensive glass, better designed window sash, improved heating and ventilating units, and more important, increased ingenuity of the architects in making the most of this successful material which has been placed at their disposal in many different forms.

Another interesting chapter has been added to the fascinating story of the *Romance of Glass* by the development of the Glass Block.

In most cases building materials with new characteristics come into existence and into use much too tardily—their need is apparent long before their actual arrival. A glass block is one of these materials. Although glass blocks are relatively new, there has been an obvious need for them for many years before they became available.

Numerous materials which have been introduced are really old materials with *new* characteristics. Generally speaking, they are fundamentally the same or similar to the original product. Since the introduction of glass blocks about ten years ago we have seen the development of a product which is neither a new product with *old* characteristics nor an old product with *new* characteristics. It is definitely a *new product* with—let us say—a combination of old characteristics already existing in several building materials. It is, fundamentally speaking, the cheapest, most direct, easiest installed and most economical and practical type of double glazing available to date. As such, it combines the properties of an efficient light transmitting medium with effective insulation. Structurally it possesses sufficient strength and adequate bond with mortar to compare favorably with the more common masonry units.

Glass blocks are made of two halves formed in a mould and then sealed together in accurate alignment to make a complete unit. During this sealing process the air within the block is greatly expanded due to the intense heat, so that when the block is closed and cooled, the air contracts and produces a vacuum of about two-thirds of an atmosphere. This unit is then coated on its mortar edges with a grit-bearing, water-and-alkaline-resistant plastic coating which insures a permanent bond between glass and cement mortar.

Erected in mortar, glass block panels have a crushing strength equivalent to or above that of other accepted masonry construction, such as a hollow clay tile wall. This strength, although entirely adequate to withstand the forces developed in the panels themselves, does not permit glass blocks to be used as a load bearing material.

Glass block construction has demonstrated through numerous tests and widespread field experience its resistance to the transverse forces created by wind pressures, with more than sufficient strength if installed according to the details recommended by the manufacturers. A most assuring demonstration of the structural integrity of glass block panels was the fact that not a single failure of a panel was reported after the disastrous New England hurricane of 1938, although many glass block installations were located in the path of the storm.

For a material possessing the structural qualities of a masonry unit, glass blocks are unique in that the panels provide adequate light transmission. It is true that the transmission of individual units is not equal to that of plate glass or window glass but, generally speaking, a glass block panel cannot be considered merely as a window. The very nature of the product offers the opportunity to use wide expanses of glass, insuring that any wall so treated will provide ample interior lighting. The transmission factors of individual units may be varied by changes in configuration or design. Blocks are available either for altering the direction or for complete diffusion of light, to provide the architect with a versatile medium for interior daylighting.

TABLE 1
HEAT TRANSMISSION COEFFICIENTS

Construction	*Heat Transmission**
Ordinary Windows, single glazed	1.13
Concrete Wall, 8 inches thick	0.70
Ordinary Windows, double glazed	0.50
Glass Blocks	0.49
Brick, 8 inches thick with plaster inside	0.42
Brick Veneer on hollow tile, 8 inches thick with plaster inside	0.33

**Values cited are B.T.U. per square foot per degree F. Temperature difference with 15 mile wind on outside.*

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TABLE 2

ILLUSTRATION OF SAVINGS IN HEAT EFFECTED WITH GLASS BLOCKS

8″ brick wall (area 50′ x 10′) — ¾″ plaster on furred metal lath. Temperature inside 70° F.—outside 0° F. Wind at 15 m.p.h.

With 100 sq. ft. of single-glazed steel sash in three openings the heat losses were as follows:

Through brick	8,960 B.T.U. per hr.
Through sash	7,910 B.T.U. per hr.
Through total wall area	16,870 B.T.U. per hr.

With 100 sq. ft. of 8″ PC Glass Blocks in three panels the heat losses were as follows:

Through brick	8,960 B.T.U. per hr.
Through glass blocks	3,430 B.T.U. per hr.
Through total wall area	12,390 B.T.U. per hr.

Heat loss through light-transmitting area less than half, with a reduction of 26% of total heat loss through the entire wall.

With 340 sq. ft. of 8″ PC Glass Blocks the heat losses were as follows:

Through brick	3,580 B.T.U. per hr.
Through glass blocks	11,660 B.T.U. per hr.
Through total wall area	15,240 B.T.U. per hr.

Heat loss 90% of panel A, but with twice as much light.

The thermal insulation of this light transmitting material is provided by the double walls of glass and dead air space sealed within the block. The heat transfer is somewhat less than half that transmitted through

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singly glazed windows. In fact, glass blocks compare favorably with many conventional wall constructions and the accompanying charts (*Table* 1, *Table* 2,) show several representative values.

By virtue of this improved insulation, glass blocks materially reduce the condensation troubles which so often occur with ordinary single glazed windows during winter months. Higher humidities can be maintained with complete freedom from condensation on glass block areas and the accompanying chart (*Table* 3) illustrates the permissible increase under representative conditions.

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Thus, inside and out, in homes, in offices, in stores, glass is assuming an ever more important place in the thoughts and specifications of the architectural profession. Yet this "Age of Glass" is only in its infancy. The variety of practical and beautiful applications to all manner of building and decorative problems seems unlimited.

The

NINTH ANNUAL CONVENTION

OF THE STATE ASSOCIATION
OF WISCONSIN ARCHITECTS

SEPTEMBER 26, 27, 28
MILWAUKEE

Wisconsin Architects are invited to submit gloss prints of work completed by them within the past two years for reproduction on the front cover of the WISCONSIN ARCHITECT. Subjects similar to those which have appeared on the last six issues. Photographs should be fully identified with name and address of subject and architect's firm. Please send all material to publisher's office, 724 E. Mason St., Milwaukee.

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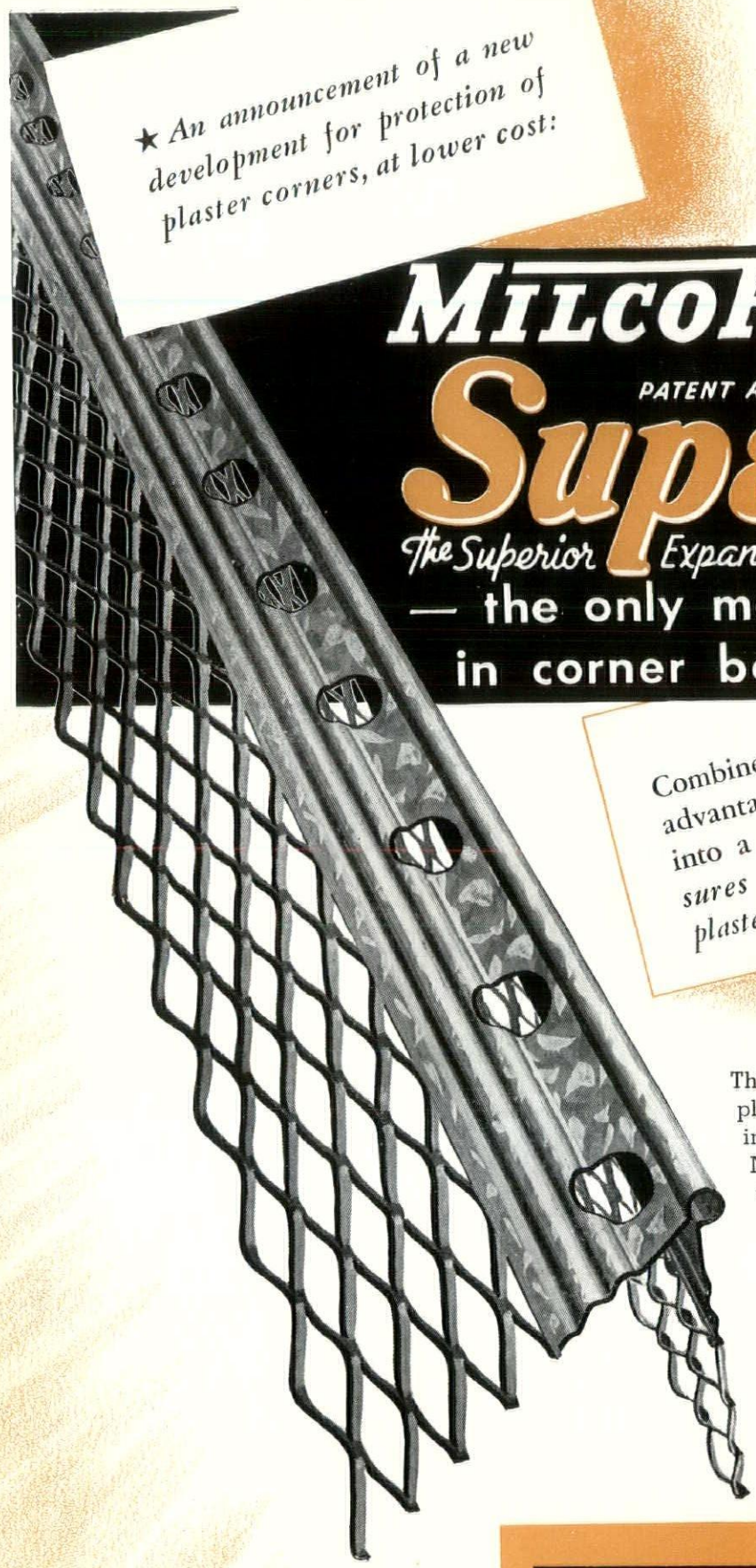

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